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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,369	10/16/2001	Maria Yuang	13612-003001	4202
26161	7590	12/13/2005	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			MERED, HABTE	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/978,369

Applicant(s)

YUANG ET AL.

Examiner

Habte Mered

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: 19 September 2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 19 September 2005 has been entered.
2. Claims 1-6 are pending.

Specification

3. The abstract of the disclosure is objected to because the last sentence of the abstract contradicts to what is thought in the Specification on page 6, Lines 16-17.

Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 3, 4 and 6 are objected to because of the following informalities:

In claim 3, the word "ans" needs to be replaced by the word "and" or some other appropriate word.

In claim 4, the phrase "the actual achieved channel throughput is computer" is incomprehensible and needs to be rephrased.

In claim 6, the phrase "controls fields" needs to be replaced by the phrase "control fields".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. In light of the Applicant's amendment filed on 19 September 2005, the rejection of claims 1-6 under the second paragraph of 35 U.S.C. 112 has been withdrawn.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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7. **Claims 1-6** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

8. In **claim 1**, item B, referring to the phrase "...maximum-sized frame satisfying the most stringent quality of service requirement...", the specification does not describe this feature in sufficient detail to enable one skilled in the art to determine how a maximum-sized frame can satisfy the most stringent quality of service requirement. The specification does not provide any instruction or direction on how a maximum-sized frame can meet the requirement of the most stringent quality of service. First, reading line 10 of page 2, one would get the understanding the frame size is a quality of service as each frame partition reflects a bandwidth quality of service. Therefore it is not clear at all how a maximum value of a particular QoS, which in this case is the frame size, will satisfy the most stringent quality of service requirement such as bounded delay and Minimum Cell Rate (MCR) which are QoS mentioned by the Applicant on page 1, line 1. Further an apparent attempt to explain this limitation on page 5, Lines 9-11 of the specification simply restates the limitation as "... , prior to the beginning of frame n, it determines the maximum frame size $F_{max}(n)$ in accordance with the current most stringent QoS delay/throughput requirement." However, one skilled in the art cannot determine to whom Applicant is referring to as "it" in the phrase just cited from page 5, Lines 9-11 of the specification. After a thorough review of the specification and

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drawings, one skilled in the art will find the specification fails to adequately describe the following:

- (a) the entity responsible for determining the maximum frame size
- (b) how the frame size is determined based on the stringent quality of service
- (c) how the maximum-sized frame satisfies the most stringent quality of service
- (d) how and on what basis is the most stringent quality of service selected

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claim 3** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. In **claim 3**, there is contradicting support in the specification for the limitation that states, "the contention bandwidth is chosen as the smaller value between the remaining unreserved bandwidth and favorable bandwidth". In the specification on page 6, lines 15-17 indicates the remaining unreserved bandwidth is used as claimed while on page 7, line 5 it is indicated a reserved bandwidth is used. It is not clear which bandwidth is used to determine the contention bandwidth.

Response to Arguments

12. Applicant's arguments filed 19 September 2005 have been fully considered but they are not persuasive.

13. Applicant, in the Remarks on page 1, argues that frame size affects quality of service and cites as a support line 24 on page 2 to line 1 on page 3 of the specification.

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Examiner wants to make clear that the arguments presented by the Applicant on this issue have not adequately addressed the initial issue raised by the Examiner. The Applicant still needs to point out the support in the specification on how a maximum-sized frame satisfies the most stringent quality of service requirement when for instance different type of QoS is taken into consideration. Since the Applicant's invention is pertinent to ATM wireless the QoS in such networks can be Cell Error Ratio (CER), Severely Errored Cell Block Ratio (SECBR), Cell Loss Ratio CLR), Cell Misinsertion Rate (CMR), Cell Transfer Delay (CTD), Minimum Cell Rate (MCR), etc.... It is not clear to the Examiner how such parameters can attain the most stringent value with a maximum sized frame, which in the Applicant's case is another form of QoS. Further, it is not clear at all how one is sure of getting a maximum sized frame.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HM
06-02-2005



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